

103 RECEIVED 03 FEB 2006

DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

10/567413

INTERNATIONAL APPLICATION NO.  
PCT/CN2004/000899

INTERNATIONAL FILING DATE  
August 6, 2003

PRIORITY DATE CLAIMED  
August 5, 2004

TITLE OF INVENTION

THE PREPARATION METHOD OF EXO-PRESSURE TYPE POLY(VINYLDENE FLUORIDE) HOLLOW FIBER  
MEMBRANE SPINNED UTILIZING A IMMERSION-COAGULATION METHOD AND THE PRODUCT THEREOF

APPLICANT(S) FOR DO/EO/US

Xiang LI  
Xiaomai WANG

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☐ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c)(2))
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☒ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☒ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☒ A copy of the International Search Report (PCT/ISA/210).

Items 13 to 23 below concern document(s) or information included:

13. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☒ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☒ A substitute specification.
18. ☒ A power of attorney and/or change of address letter.
19. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
20. ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).
22. ☒ Express Mail Label No. EV 790916018 US

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/367413</b>	INTERNATIONAL APPLICATION NO. <b>PCT/CN2004/000899</b>	ATTORNEY'S DOCKET NUMBER <b>133697-0022</b>
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23. Other items or information:

Fee Transmittal  
Return Receipt Post Card

**IAP20 Res'd PCT/PTO 03 FEB 2006**

	CALCULATIONS	PTO USE												
The following fees have been submitted:														
24. <input checked="" type="checkbox"/> Basic national fee ..... \$300	\$ 300.00													
25. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article ..... \$0 All other situations. .... \$200	\$ 200.00													
26. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the International preliminary examination report by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4). . . \$0 Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the as an International Searching Authority. .... \$100 International Search Report prepared by an ISA other than the US and provided to the previously communicated to the US by the IB. .... \$400 All other situations. .... \$500	\$ 400.00													
<b>TOTAL OF 24, 25 and 26 =</b>	<b>\$ 900.00</b>													
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.														
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Total Sheets</th> <th style="width: 15%;">Extra Sheets</th> <th style="width: 30%;">Number of each additional 50 or fraction thereof (round up to a whole)</th> <th style="width: 15%;">RATE</th> </tr> </thead> <tbody> <tr> <td>16 - 100 =</td> <td>0 /50 =</td> <td>0</td> <td>x \$250.00</td> </tr> </tbody> </table>	Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole)	RATE	16 - 100 =	0 /50 =	0	x \$250.00	\$ 0.00					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole)	RATE											
16 - 100 =	0 /50 =	0	x \$250.00											
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).														
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">CLAIMS</th> <th style="width: 15%;">NUMBER FILED</th> <th style="width: 15%;">NUMBER EXTRA</th> <th style="width: 15%;">RATE</th> </tr> </thead> <tbody> <tr> <td>Total claims</td> <td>21 - 20 =</td> <td>1</td> <td>x \$50.00</td> </tr> <tr> <td>Independent claims</td> <td>2 - 3 =</td> <td>0</td> <td>x \$200.00</td> </tr> </tbody> </table>	CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	Total claims	21 - 20 =	1	x \$50.00	Independent claims	2 - 3 =	0	x \$200.00	\$ 50.00	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE											
Total claims	21 - 20 =	1	x \$50.00											
Independent claims	2 - 3 =	0	x \$200.00											
MULTIPLE DEPENDENT CLAIMS (if applicable) <input type="checkbox"/> + \$360.00	\$ 0.00													
<b>TOTAL OF ABOVE CALCULATIONS =</b>	<b>\$ 950.00</b>													
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.	\$ 475.00													
<b>SUBTOTAL =</b>	<b>\$ 475.00</b>													
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).	\$ 0.00													
<b>TOTAL NATIONAL FEE =</b>	<b>\$ 475.00</b>													
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +	\$ 400.00													
<b>TOTAL FEES ENCLOSED =</b>	<b>\$ 875.00</b>													
	Amount to be	\$												
	Amount to be	\$												

- a. ☐ A check in the amount of \$ \_\_\_\_\_ to cover the above fees is enclosed.
- b. ☒ Please charge my Deposit Account No. 12-2136 in the amount of \$ \$875.00 to cover the above fees.  
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 12-2136. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

Michael S. Gzybowski  
BUTZEL LONG  
350 South Main Street  
Suite 300  
Ann Arbor, Michigan 48104

SIGNATURE

Michael S. Gzybowski

NAME

32,816

REGISTRATION NUMBER

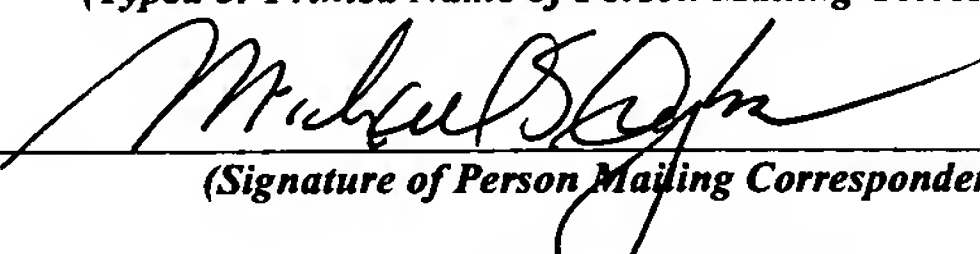
February 3, 2006

DATE

10/567413

IAP20 REC'D PCT/PTO 03 FEB 2006

1AP2004 Rec'd PCT/PTO 03 FEB 2006

<b>CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)</b> Applicant(s): Xiang LI et al.			Docket No. 133697-0022	
Application No. <b>Unknown</b>	Filing Date February 3, 2006	Examiner <b>Unknown</b>	Customer No. 35684	Group Art Unit <b>Unknown</b>
Invention: <b>THE PREPARATION METHOD OF EXO-PRESSURE TYPE POLY(VINYLIDENE FLUORIDE) HOLLOW FIBER MEMBRANE SPINNED UTILIZING A IMMERSION-COAGULATION METHOD AND THE PRODUCT THEREOF</b>				
<p>I hereby certify that the following correspondence:</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p><b>New National Phase PCT Application based on PCT/CN2004/000899 (see list of submitted documents below)</b></p> </div> <p style="text-align: center;"><i>(Identify type of correspondence)</i></p> <p>is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on</p> <div style="text-align: center; margin-top: 20px;"> <u>February 3, 2006</u>  <i>(Date)</i> </div> <div style="text-align: center; margin-top: 40px;"> <u>Michael S. Gzybowski</u>  <i>(Typed or Printed Name of Person Mailing Correspondence)</i>    <i>(Signature of Person Mailing Correspondence)</i>  <u>EV 790916018 US</u>  <i>("Express Mail" Mailing Label Number)</i> </div>				
<p style="text-align: center;"><b>Note: Each paper must have its own certificate of mailing.</b></p> <p>Express Mail Cover Letter; Transmittal Letter to the U.S. Designated/Elected Office Concerning a Filing Under 35 U.S.C. 371 (PCT-1390/PCT/US1) (2 pgs) - In Duplicate ;PCT Publication of International Application No. PCT/CN2004/000899 with Attached Search Report (Publication No. PCTWO2005/014151 A1) (21 pgs); Translation of International Application No. PCT/CN2004/000899 (Publication No. PCTWO2005/014151 into English Including Abstract, Specification, and Claims (16 pgs) ; Formal Drawings (3 sheets. 7 Figures) Substitute Specification - Clean Copy (14 pgs) ; Substitute Specification - Marked-Up Copy (15 pgs) Preliminary Amendment (11 pgs) ; PCT/USA National Declaration and Power of Attorney (2 pgs) National Declaration and Power of Attorney (2 pages) ;Assignment (2 Pages) Assignment Recordation Cover Sheet (1 page) ;Fee Transmittal (1 pg) ;Return Post Card</p>				

10/567413

ATTORNEY'S DOCKET NO.: 133697-0022

"EXPRESS MAIL" COVER LETTER

U.S. PATENT APPLICATION

APR 20 2006 PTO 03 FEB 2006

Date: February 3, 2006

Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

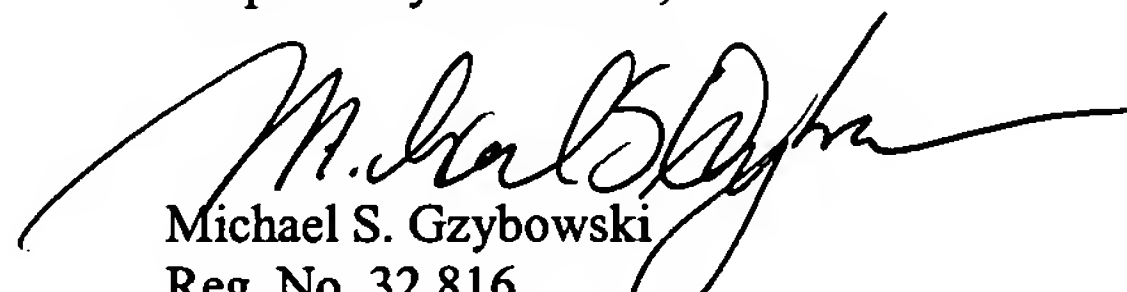
Re: **APPLICANTS:** Xiang LI and Xiaomai WANG  
**TITLE OF INVENTION:** THE PREPARATION METHOD OF EXO-PRESSURE TYPE  
POLY(VINYLIDENE FLUORIDE) HOLLOW FIBER MEMBRANE SPINNED  
UTILIZING A IMMERSION-COAGULATION METHOD AND THE PRODUCT  
THEREOF

Sir:

Forwarded herewith is the above-identified application, consisting of the following:

Express Mail Cover Letter;  
Certificate of Mailing by "Express Mail"  
Transmittal Letter to the U.S. Designated/Elected Office Concerning a Filing Under 35 U.S.C. 371 (PCT-1390/PCT/US1) (2 pgs) –  
**In Duplicate**  
PCT Publication of International Application No. PCT/CN2004/000899 with Attached Search Report (Publication  
No. PCTWO2005/014151 A1) (21 pgs)  
Translation of International Application No. PCT/CN2004/000899 (Publication No. PCTWO2005/014151 into English Including  
Abstract, Specification, and Claims (16 pgs)  
Formal Drawings (3 sheets. 7 Figures)  
Substitute Specification - **Clean Copy** (14 pgs)  
Substitute Specification – **Marked-Up Copy** (15 pgs)  
Preliminary Amendment (11 pgs)  
PCT/USA National Declaration and Power of Attorney (2 pgs)  
Assignment (2 Pages)  
Assignment Recordation Cover Sheet (1 page)  
Fee Transmittal (1 pg)  
Return Post Card

Respectfully submitted,

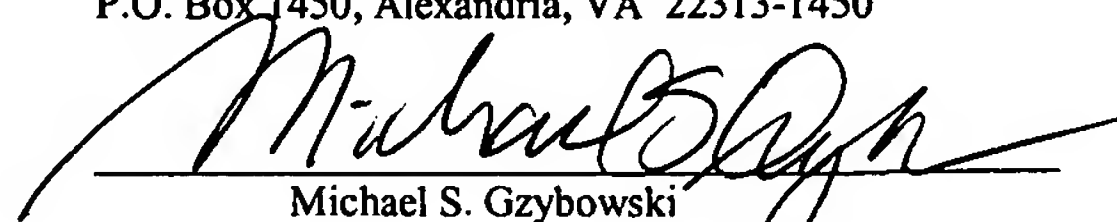
  
Michael S. Gzybowski  
Reg. No. 32,816  
Attorney for Applicant

BUTZEL LONG  
350 South Main Street  
Suite 300  
Ann Arbor, MI 48104  
734-995-3110 (ph)

"EXPRESS MAIL" Mailing No. EV 790916018 US

Date of Deposit: February 3, 2006

I hereby certify that this paper is being deposited with  
The United States Postal Service "EXPRESS MAIL  
POST OFFICE TO ADDRESSEE" service under  
37 CFR 1.10 on the date indicated above and is addressed  
to the Mail Stop PCT, Commissioner for Patents,  
P.O. Box 1450, Alexandria, VA 22313-1450

  
Michael S. Gzybowski



Doc Code:

PTO/SB/17 (12-04v2)  
Approved for use through 07/31/2006. OMB 0651-0032  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<p><i>Effective on 12/08/2004.</i></p> <p><i>Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).</i></p> <h2 style="margin: 0;">FEE TRANSMITTAL</h2> <h3 style="margin: 0;">for FY 2005</h3>		<p><b>Complete if Known</b></p>	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27		Application Number	Unknown <b>10/567412</b>
		Filing Date	February
		First Named Inventor	Xiang LI et al.
		Examiner Name	Unknown
		Art Unit	Unknown
<p><b>TOTAL AMOUNT OF PAYMENT (\$)</b> <b>\$875.00</b></p>		Attorney Docket No.	133697-0022

**METHOD OF PAYMENT** (check all that apply)

☐ Check  
 ☐ Credit Card  
 ☐ Money Order  
 ☐ None  
 ☐ Other (please identify): \_\_\_\_\_

☒ Deposit  
 Deposit Account Number: 12-2136  
 Deposit Account Name: BUTZEL LONG

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below  
 ☐ Charge fee(s) indicated below, except for the filing fee

☒ Charge any additional fee(s) or any underpayment of fee(s) under 37 CFR 1.16 and 1.17  
 ☒ Credit any overpayments

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**FEE CALCULATION**

**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid(\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

**2. EXCESS CLAIM FEES**

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
- 20 or HP =	x	\$25.00	= \$0.00

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
- 3 or HP =	x	\$100.00	= \$0.00

HP = highest number of independent claims paid for, if greater than 3.

**3. APPLICATION SIZE FEE**


If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listing under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
- 100 =	0	0 (round up to a whole)	x \$125.00	= \$0.00

**4. OTHER FEE(S)**

Non-English specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): **Basic National Phase Filing Fee and Assignment Recordation Fee** **\$875.00**

<p><b>SUBMITTED BY</b></p>				
Signature		Registration No. (Attorney/Agent)	32,816	Telephone 734-995-3110
Name (Print/Type)	Michael S. Gzybowski		Date	February 3, 2006

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.